

California Board of Registered Nursing

2011-2012 Annual School Report

Data Summary and Historical Trend Analysis

A Presentation of Pre-Licensure Nursing Education Programs in California

Bay Area

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INTRODUCTION

Each year, the California Board of Registered Nursing (BRN) requires all pre-licensure registered nursing programs in California to complete a survey detailing statistics of their programs, students and faculty. The survey collects data from August 1 through July 31. Information gathered from these surveys is compiled into a database and used to analyze trends in nursing education.

The BRN commissioned the University of California, San Francisco (UCSF) to conduct a historical analysis of data collected from the 2001-2002 through the 2011-2012 survey. In this report, we present ten years of historical data from the BRN Annual School Survey. Data analyses were conducted statewide and for nine economic regions¹ in California, with a separate report for each region. All reports are available on the BRN website (<http://www.rn.ca.gov/>).

This report presents data from the 10-county Bay Area. Counties in the region include Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma. All data are presented in aggregate form and describe overall trends in the areas and over the times specified and, therefore, may not be applicable to individual nursing education programs. Additional data from the past ten years of the BRN Annual School Survey are available in an interactive database on the BRN website.

Beginning with the 2011-2012 Annual School Survey, certain questions were revised to allow schools to report data separately for satellite campuses located in regions different from their home campus. This change was made to more accurately report student and faculty data by region, but it has the result that data which were previously reported in one region are now being reported in a different region. This is important because changes in regional totals that appear to signal either an increase or a decrease may in fact be the result of a program reporting satellite campus data in a different region. Data tables impacted by this change will be footnoted. In these instances, comparing 2011-2012 data to the previous year is not recommended. When regional totals include satellite campus data from a program whose home campus is located in a different region, it will be listed in Appendix A.

¹ The nine regions include: (1) Northern California, (2) Northern Sacramento Valley, (3) Greater Sacramento, (4) Bay Area, (5) San Joaquin Valley, (7) Central Coast, (8) Los Angeles Area (Los Angeles and Ventura counties), (9) Inland Empire (Orange, Riverside, and San Bernardino counties), and (10) Southern Border Region. Counties within each region are detailed in the corresponding regional report. The Central Sierra (Region 6) does not have any nursing education programs and was, therefore, not included in the analyses.

DATA SUMMARY AND HISTORICAL TREND ANALYSIS²

This analysis presents pre-licensure program data from the 2011-2012 BRN School Survey in comparison with data from previous years of the survey. Data items addressed include the number of nursing programs, enrollments, completions, retention rates, new graduate employment, student and faculty census data, the use of clinical simulation, availability of clinical space, and student clinical practice restrictions.

Trends in Pre-Licensure Nursing Programs

Number of Nursing Programs

In 2011-2012, the Bay Area had a total of 30 pre-licensure nursing programs. Of these programs, 18 are ADN programs, 8 are BSN programs, and 4 are ELM programs. This represents the net loss of 1 ELM program over the previous year. Nearly three-quarters (73.3%) of pre-licensure nursing programs in the Bay Area are public. However, the share of public programs has been decreasing since 2004-2005, from a high of 78.6% (n=22) to its current share of 73.3% (n=22) in 2011-2012.

Number of Nursing Programs

	<i>Academic Year</i>									
	<i>2002-2003</i>	<i>2003-2004</i>	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
Total Nursing Programs*	27	27	28	28	29	30	30	30	31	30
ADN	16	16	16	16	17	18	18	18	18	18
BSN	7	7	7	7	7	7	7	7	8	8
ELM	4	4	5	5	5	5	5	5	5	4
Public	21	21	22	22	22	23	23	23	23	22
Private	6	6	6	6	7	7	7	7	8	8
Total Number of Schools	24	24	24	24	25	26	26	26	27	27

*Some schools admit students in more than one program. The number of nursing programs may be greater than the number of nursing schools in the region.

In 2011-2012 the share of nursing programs that partner with another nursing school decreased for the first time since 2006-2007. In 2011-2012, 40% (n=12) of Bay Area nursing programs collaborated with another program that offered a higher degree than offered at their own program.

	Academic Year						
	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
Partnerships*							
Schools that partner with another program that leads to a higher degree	7.4%	3.6%	10.3%	26.7%	43.3%	48.4%	40.0%
Total number of programs	27	28	29	30	30	31	30

*These data were collected for the first time in 2005-2006.

² 2011-2012 data may be influenced by satellite campus data being reported and allocated to their proper region for the first time in the 2011-2012 survey. Tables affected by this change are noted, and we caution the reader against comparing data collected in 2011-2012 with data collected in previous year's surveys.

Admission Spaces and New Student Enrollments

Pre-license nursing programs in the Bay Area reported a total 2,375 spaces available for new students in 2011-2012. These spaces were filled with a total of 2,545 students, which represents the ninth consecutive year pre-license nursing programs in the Bay Area enrolled more students than were spaces available. 43.3% (n=13) of programs reported that they overenrolled students and the most frequently reported reason for doing so was to account for attrition.

Availability and Utilization of Admission Spaces[†]

	<i>Academic Year</i>									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Spaces Available	1,806	1,869	2,060	2,193	2,319	2,368	2,513	2,152	2,523	2,375
New Student Enrollments	1,776	1,894	2,091	2,250	2,521	2,752	2,874	2,640	2,805	2,545
% Spaces Filled	98.3%	101.3%	101.5%	102.6%	108.7%	116.2%	114.4%	122.7%	111.2%	107.2%

[†]2011-2012 data may be influenced by the allocation of satellite campus data to another region

Bay Area nursing programs continue to receive more applications requesting entrance into their programs than can be accommodated. The increase in qualified applications, combined with the decrease in availability of space, is reflected in the 67.4% of qualified applications that were not accepted for admission in 2011-2012.

Student Admission Applications^{*†}

	<i>Academic Year</i>									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Qualified Applications	4,015	4,567	5,445	6,623	8,070	7,910	8,077	8,063	7,574	7,812
Accepted	1,776	1,894	2,091	2,250	2,521	2,752	2,874	2,640	2,805	2,545
Not Accepted	2,239	2,673	3,354	4,373	5,549	5,158	5,203	5,423	4,769	5,267
% Qualified Applications Not Accepted	55.8%	58.5%	61.6%	66.0%	68.8%	65.2%	64.4%	67.3%	63.0%	67.4%

*These data represent applications, not individuals. A change in the number of applications may not represent an equivalent change in the number of individuals applying to nursing school.

[†]2011-2012 data may be influenced by the allocation of satellite campus data to another region

Pre-license nursing programs in the Bay Area region enrolled 2,545 new students in 2011-2012. The distribution of new enrollments by program type was 44.4% ADN (n=1,130), 46.3% BSN (n=1,179), and 9.3% ELM (n=236). A majority of the new students enrolled are at one the region's public programs, accounting for 56.9% (n=1,449) of total new student enrollments in 2011-2012.

New Student Enrollment by Program Type[†]

	<i>Academic Year</i>									
	<i>2002-2003</i>	<i>2003-2004</i>	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
New Student Enrollment	1,776	1,894	2,091	2,250	2,521	2,752	2,874	2,640	2,805	2,545
ADN	882	961	1,039	1,113	1,332	1,378	1,426	1,313	1,284	1,130
BSN	686	672	777	846	872	1,043	1,173	1,031	1,246	1,179
ELM	208	261	275	291	317	331	275	296	275	236
Private	428	560	592	664	764	900	1,042	1,037	1,189	1,096
Public	1,348	1,334	1,499	1,586	1,757	1,852	1,832	1,603	1,616	1,449

[†]2011-2012 data may be influenced by the allocation of satellite campus data to another region

Student Census Data

A total of 5,343 students were enrolled in a Bay Area pre-license nursing program as of October 15, 2012. The 2012 census of the region's programs indicates that 33.4% (n=1,786) of students were enrolled in ADN programs, 56.7% (n=3,029) in BSN programs, and 9.9% (n=528) in ELM programs.

Student Census Data*[†]

<i>Program Type</i>	<i>Year</i>									
	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
ADN	1,660	1,661	1,885	1,621	1,935	2,208	2,176	2,072	1,964	1,786
BSN	1,927	1,971	2,251	2,431	2,179	2,556	2,790	2,890	2,851	3,029
ELM	338	487	472	422	586	601	592	542	664	528
Total Nursing Students	3,925	4,119	4,608	4,474	4,700	5,365	5,558	5,504	5,479	5,343

*Census data represent the number of students on October 15th of the given year

[†]2012 data may be influenced by the allocation of satellite campus data to another region

Student Completions

Program completions at Bay Area pre-licensure nursing programs totaled 2,148 in 2011-2012. The distribution of completions by program type was 44.7% ADN (n=961), 44.9% BSN (n=965), and 10.3% ELM (n=222).

Student Completions[†]

	<i>Academic Year</i>									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Student Completions	1,305	1,423	1,595	1,752	1,788	2,193	2,319	2,424	2,341	2,148
ADN	703	787	821	903	863	993	1,055	1,148	1,124	961
BSN	443	474	569	639	697	973	979	986	1,017	965
ELM	159	162	205	210	228	227	285	290	200	222

[†]2011-2012 data may be influenced by the allocation of satellite campus data to another region

Retention and Attrition Rates

Of the 2,159 students scheduled to complete a Bay Area nursing program in the 2011-2012 academic year, 82.5% (n=1,781) completed the program on-time, 3.1% (n=68) are still enrolled, while 14.4% (n=310) dropped out or were disqualified from the program.

Student Retention and Attrition[†]

	<i>Academic Year</i>									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Students Scheduled to Complete the Program	2,025	1,824	2,023	1,781	1,965	2,205	2,293	2,165	2,113	2,159
Completed On Time	1,599	1,455	1,496	1,427	1,591	1,746	1,827	1,717	1,688	1,781
Still Enrolled	146	132	120	101	137	153	158	153	100	68
Attrition	280	237	407	253	237	306	308	295	325	310
Completed Late [‡]								97	102	62
Retention Rate*	79.0%	79.8%	73.9%	80.1%	81.0%	79.2%	79.7%	79.3%	79.9%	82.5%
Attrition Rate**	13.8%	13.0%	20.1%	14.2%	12.1%	13.9%	13.4%	13.6%	15.4%	14.4%
% Still Enrolled	7.2%	7.2%	5.9%	5.7%	7.0%	6.9%	6.9%	7.1%	4.7%	3.1%

[†]2011-2012 data may be influenced by the allocation of satellite campus data to another region

[‡]Data were collected for the first time in the 2009-2010 survey. These completions are not included in the calculation of either the retention or attrition rates.

*Retention rate = (students completing program on-time)/(students scheduled to complete)

**Attrition rate = (students dropped or disqualified who were scheduled to complete)/(students scheduled to complete)

Note: Blank cells indicate the information was not requested in the given year.

Attrition rates among the region's pre-license nursing programs vary by program type. Average attrition rates are lowest among ELM programs and highest among ADN programs, and are also slightly lower among private programs (13.5%) compared to public nursing programs (14.8%).

Attrition Rates by Program Type*†

Program Type	Academic Year									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
ADN	20.8%	14.4%	24.3%	18.9%	17.0%	21.0%	17.8%	18.4%	18.2%	19.3%
BSN	10.0%	13.0%	15.2%	10.5%	6.5%	6.3%	8.9%	7.2%	13.6%	10.4%
ELM	2.4%	5.4%	16.3%	5.0%	8.8%	5.5%	7.1%	7.2%	6.0%	5.1%
Private	7.6%	4.8%	19.2%	12.3%	9.6%	6.1%	10.2%	10.8%	17.7%	13.4%
Public	18.0%	16.2%	20.5%	15.0%	13.1%	17.2%	14.9%	14.7%	14.3%	14.8%

*Changes to the survey that occurred between 2003-2004 and 2005-2006 may have affected the comparability of these data over time.

†2011-2012 data may be influenced by the allocation of satellite campus data to another region

Retention and Attrition Rates for Accelerated Programs

The 2011-2012 average retention rate for accelerated programs in the Bay Area was 93.3%, which is much higher by comparison with traditional programs. Similarly, the average attrition rate was 1.8%, which is considerably lower than the average rate for traditional programs.

Student Retention and Attrition for Accelerated Programs*†

	Academic Year				
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Students Scheduled to Complete the Program	222	254	332	261	223
Completed On Time	213	244	321	249	208
Still Enrolled	4	4	3	7	11
Attrition	5	6	8	5	4
Completed Late†			8	6	14
Retention Rate**	95.9%	96.1%	96.7%	95.4%	93.3%
Attrition Rate***	2.3%	2.4%	2.4%	1.9%	1.8%
% Still Enrolled	1.8%	1.6%	0.9%	2.7%	4.9%

*Retention and attrition data for accelerated programs were collected for the first time in 2007-2008.

†2011-2012 data may be influenced by the allocation of satellite campus data to another region.

‡Data were collected for the first time in 2009-2010 survey. These completions are not included in the calculation of either the retention or attrition rates.

**Retention rate = (students completing program on-time)/(students scheduled to complete)

***Attrition rate = (students dropped or disqualified who were scheduled to complete)/(students scheduled to complete)

Note: Blank cells indicated that the applicable information was not requested in the given year.

Employment of Recent Nursing Program Graduates³

Hospitals represent the most frequently reported employment setting for recent graduates of pre-license programs in the Bay Area. In 2011-2012, the region's programs reported that 48.4% of employed recent graduates were working in a hospital setting. Programs also reported that slightly more than one-quarter of recent graduates (26.5%) had not found employment in nursing at the time of the survey. The 2011-2012 average regional share of new graduates employed in nursing in California was 54.0%.

Employment of Recent Nursing Program Graduates[†]

Employment Location	Academic Year							
	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
Hospital	64.6%	76.5%	89.3%	84.5%	53.8%	42.7%	34.5%	48.4%
Long-term care facilities	0.5%	0.4%	0.8%	1.8%	13.4%	12.6%	12.3%	9.7%
Community/public health facilities	4.5%	1.9%	4.3%	1.0%	3.0%	1.8%	5.7%	4.8%
Other healthcare facilities	1.3%	1.4%	2.1%	1.5%	8.6%	5.4%	7.4%	7.3%
Other	0%	19.8%	11.5%	11.2%	43.7%	15.3%	14.3%	3.3%
Unable to find employment*						37.6%	41.8%	26.5%
In California	51.6%	71.6%	89.9%	89.8%	70.5%	75.6%	56.4%	54.0%

[†]2011-2012 data may be influenced by the allocation of satellite campus data to another region

*Data were added to the survey in 2009-2010

Note: Blank cells indicate the information was not requested in the given year

Clinical Simulation in Nursing Education

Between 8/1/11 and 7/31/12, all Bay Area nursing schools reported using clinical simulation⁴. As in the previous year, the most frequently reported reasons for why schools used a clinical simulation center in 2011-2012 were to standardize clinical experiences, to provide clinical experience not available in a clinical setting, and to check clinical competencies. Of the 27 schools that used clinical simulation centers in 2011-2012, 44.4% (n=12) plan to expand the center.

Reasons for Using a Clinical Simulation Center*	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>
To standardize clinical experiences	88.9%	76.9%	84.6%	92.6%	81.5%
To provide clinical experience not available in a clinical setting	88.9%	76.9%	80.8%	88.9%	81.5%
To check clinical competencies	55.6%	53.8%	76.9%	63.0%	63.0%
To make up for clinical experiences	44.4%	38.5%	46.2%	51.9%	48.1%
To increase capacity in your nursing program	22.2%	11.5%	7.7%	7.4%	7.4%
Number of schools that use a clinical simulation center	18	26	26	27	27

*These data were collected for the first time in 2006-2007. However, changes in these questions for the 2007-2008 administration of the survey and lack of confidence in the reliability of the 2006-2007 data prevent comparability of the data. Therefore, data prior to 2007-2008 are not shown.

³ Graduates whose employment setting was reported as "unknown" have been excluded from this table. In 2011-2012, on average, the employment setting was unknown for 39% of recent graduates.

⁴ Clinical simulation provides a simulated real-time nursing care experience using clinical scenarios and low to hi-fidelity mannequins, which allow students to integrate, apply, and refine specific skills and abilities that are based on theoretical concepts and scientific knowledge. It may include videotaping, de-briefing and dialogue as part of the learning process.

Clinical Space & Clinical Practice Restrictions⁵

The number of Bay Area nursing programs that reported being denied access to a clinical placement, unit or shift decreased from 23 programs in 2010-2011 to 16 programs in 2011-2012. 14 of these programs (46.7% of all programs) reported being denied access to clinical placements, while 40% (n=12) were denied access to a clinical unit. Just 23.3% (n=7) were denied access to a clinical shift in 2011-2012. Access to an alternative clinical site depended on the type of space denied. Less than a quarter (21.4%) of the programs that were denied access to clinical placements were offered an alternative by the clinical site. In contrast, 50% of programs that were denied access to clinical units and 100% of programs that were denied access to shifts were offered an alternative. The lack of access to clinical space resulted in a loss of 39 clinical placements, 25 units and 4 shifts, which affected 152 students.⁶

Denied Clinical Space	2010-11	2011-12
Programs Denied Clinical Placement	18	14
Programs Offered Alternative by Site	5	3
Placements Lost	112	39
Number of programs that reported	31	30
Programs Denied Clinical Unit	15	12
Programs Offered Alternative by Site	2	6
Units Lost	37	25
Number of programs that reported	31	30
Programs Denied Clinical Shift	10	7
Programs Offered Alternative by Site	7	7
Shifts Lost	11	4
Number of programs that reported	31	30
Total number of students affected	694	152

⁵ Some of these data were collected for the first time in 2009-2010. However, changes in these questions for the 2010-2011 administration of the survey prevent comparability of the data. Therefore, data prior to 2010-2011 are not shown.

⁶ Only 8 of the 16 programs that reported experiencing a loss of clinical placements, units, or shifts also reported the total number of students affected by the loss.

Staff nurse overload or insufficient qualified staff to manage students during their clinical placements was the most frequently reported reason why Bay Area programs were denied clinical space in 2011-2012. This marks a shift from previous years when competition for space was the most frequently cited reason for space being denied. In 2011-2012, clinical space being denied for reasons related to nurse residency programs, a facility seeking magnet status, or a change in the ownership or management of a facility saw the greatest increase compared with previous years.

Reasons for Clinical Space Being Unavailable*	2009-10	2010-11	2011-12
Competition for clinical space due to increase in number of nursing students in region	79.0%	73.9%	50.0%
Staff nurse overload or insufficient qualified staff	52.6%	65.2%	68.8%
Decrease in patient census	36.8%	43.5%	37.5%
Displaced by another program	63.2%	39.1%	31.3%
Closure, or partial closure, of clinical facility		26.1%	6.3%
No longer accepting ADN students	36.8%	17.4%	18.8%
Nurse residency programs	31.6%	13.0%	25.0%
Clinical facility seeking magnet status	47.4%	8.7%	18.8%
Change in facility ownership/management		8.7%	18.8%
Implementation of Electronic Health Records system			6.3%
Other	10.5%	17.4%	18.8%
Number of programs that reported	19	23	16

*Data were collected for the first time in the 2009-2010 or 2010-2011 survey.

Note: Blank cells indicate that the applicable information was not requested in the given year.

Although there were some differences by program type, staff nurse overload and competition for clinical space due to an increase in the number of nursing students in the region were most frequently cited by all program types as reasons for being denied access to clinical space in 2011-2012. BSN programs also frequently cited a decrease in patient census for a loss of clinical space.

Reasons for Clinical Space Being Unavailable, by Program Type, 2011-2012

Reasons for Clinical Space Being Unavailable	Program Type			
	ADN	BSN	ELM	Total
Competition for clinical space due to increase in number of nursing students in region	40.0%	60.0%	100%	50.0%
Staff nurse overload or insufficient qualified staff	60.0%	80.0%	100%	68.8%
Decrease in patient census	30.0%	60.0%	0%	37.5%
Displaced by another program	30.0%	40.0%	0%	31.3%
Closure, or partial closure, of clinical facility	10.0%	0%	0%	6.3%
No longer accepting ADN students	30.0%	0%	0%	18.8%
Nurse residency programs	20.0%	20.0%	100%	25.0%
Change in facility ownership/management	20.0%	0%	100%	18.8%
Clinical facility seeking magnet status	20.0%	0%	100%	18.8%
Implementation of Electronic Health Records system	0%	20%	0%	6.3%
Other	30.0%	0%	0%	18.8%
Number of programs that reported	10	5	1	16

Programs that lost access to clinical space were asked to report on the strategies used to cover the lost placements, sites, or shifts. The most frequently reported strategy (62.5%) was to replace the lost clinical space at the same clinical site. However, more than half of the programs also reported being able to replace lost space by adding a new clinical site (56.3%), or with replacement at a different site currently being used by the program (56.3%).

Strategies to Address the Loss of Clinical Space, 2011-2012*

Strategy to Address Lost Clinical Space	2011-12
Replaced lost space at same clinical site	62.5%
Replaced lost space at different site currently used by nursing program	56.3%
Added/replaced lost space with new site	56.3%
Clinical simulation	50.0%
Reduced student admissions	6.3%
Other	6.3%
Number of programs that reported	16

*Data were collected for the first time during the 2011-2012 survey.

33.3% (n=10) of pre-license nursing programs in the Bay Area reported an increase in out-of-hospital clinical placements in 2011-2012. This represents a decrease from the 45% (n=14) of nursing programs reporting an increase in out-of-hospital clinical placements in 2010-2011. The most frequently reported non-hospital site was a public health/community health agency (reported by 70% of all responding programs). Outpatient mental health/substance abuse services as well as skilled nursing or rehabilitation facilities were also frequently reported as alternative clinical placement sites.

Alternative Clinical Sites*	2010-11	2011-12
Public health or community health agency	57.1%	70.0%
Outpatient mental health/substance abuse	50.0%	50.0%
School health service (K-12 or college)	50.0%	30.0%
Skilled nursing/rehabilitation facility	42.9%	40.0%
Surgery center/ambulatory care center	35.7%	20.0%
Home health agency/home health service	28.6%	20.0%
Hospice	28.6%	30.0%
Medical practice, clinic, physician office	14.3%	30.0%
Renal dialysis unit	14.3%	10.0%
Case management/disease management	14.3%	0%
Occupational health or employee health service	7.1%	0%
Urgent care, not hospital-based	0%	0%
Correctional facility, prison or jail	0%	0%
Other		40.0%
Number of programs that reported	14	10

*Data collected for the first time in 2010-2011

Note: Blank cells indicate that the applicable information was not requested in the given year.

The number of Bay Area nursing schools reporting that pre-licensure students in their programs had encountered restrictions to clinical practice imposed on them by clinical facilities declined from 88.9% (n=24) of schools in 2010-2011 to 81.5% (n=22) of schools in 2011-2012. The most common types of restrictions students faced continued to be access to the clinical site due to a visit from the Joint Commission or another accrediting agency, and access to bar coding medication administration. Access to electronic medical records (63.6%, n=14) and patients due to staff workload (59.1%, n=13) were cited more frequently in 2011-2012 compared to previous years.

Common Types of Restricted Access for RN Students	2009-10	2010-11	2011-12
Clinical site due to visit from accrediting agency (Joint Commission)	72.7%	91.7%	77.3%
Bar coding medication administration	68.2%	70.8%	68.2%
Glucometers	40.9%	54.2%	22.7%
Student health and safety requirements		50.0%	31.8%
IV medication administration	36.4%	45.8%	31.8%
Electronic Medical Records	68.2%	41.7%	63.6%
Automated medical supply cabinets	54.5%	37.5%	40.9%.
Some patients due to staff workload		37.5%	59.1%
Alternative setting due to liability	22.7%	16.7%	27.3%
Direct communication with health team	18.2%	12.5%	9.1%
Number of schools that reported	22	24	22

Note: Blank cells indicated that the applicable information was not requested in the given year.

Faculty Census Data^{7,8}

On October 15, 2012 there were 788 total nursing faculty,⁹ 31.0% of whom (n=244) were full-time while 69.0% (n=544) were part-time. In addition, there were 133 vacant faculty positions in the Bay Area. These vacancies represent a 14.4% faculty vacancy rate. Faculty vacancy rates of 15% or higher were reported by approximately one-quarter of all programs in the Bay Area, with a small number of programs reporting vacancy rates of 20% or higher. The data suggest that high rates of retiring faculty may have been a factor. 43% of programs reported that 10% or more of the total number faculty had retired or left the program during the 2011-2012 academic year.

Faculty Census Data[†]

	Year									
	2003	2004	2005*	2006	2007*	2008	2009	2010	2011	2012
Total Faculty	533	579	623	652	802	855	836	875	932	788
Full-time	260	240	190	237	334	333	321	319	314	244
Part-time	273	339	201	415	466	522	515	556	618	544
Vacancy Rate**	5.8%	3.5%	5.5%	10.7%	4.8%	3.5%	3.9%	2.9%	4.1%	14.4%
Vacancies	33	21	36	78	40	31	34	26	40	133

[†]2012 data may be influenced by the allocation of satellite campus data to another region

*The sum of full- and part-time faculty did not equal the total faculty reported in these years.

**Vacancy rate = number of vacancies/(total faculty + number of vacancies)

In 2011-2012, the majority (70.4%, n=19) of Bay Area nursing schools report that their faculty work overloaded schedules. 84.2% (n=16) of these schools pay the faculty extra for the overloaded schedule.

Overloaded Schedules for Faculty*	Academic Year			
	2008-09	2009-10	2010-11	2010-11
Schools with overloaded faculty	17	17	21	19
Share of schools that pay faculty extra for the overload	94.1%	94.1%	90.5%	84.2%
Total number of schools	26	26	27	27

*Data were collected for the first time in 2008-2009

⁷ Census data represent the number of faculty on October 15th of the given year.

⁸ One program in the region did not report faculty data for the 2011-2012 survey.

⁹ Since faculty may work at more than one school, the number of faculty reported may be greater than the actual number of individuals who serve as faculty in nursing schools in the region.

Summary

Over the past decade, the number of Bay Area pre-license nursing programs has grown by 11.1%, from 27 programs in 2002-2003 to 30 programs in 2011-2012. Despite this overall growth, 2011-2012 saw the first decrease in the number of programs in the past decade, due to the loss of an ELM program. Since 2006-2007, the share of nursing programs that partner with other schools that offer programs that lead to a higher degree has increased from 3.6% to 40%.

Bay Area programs reported a total of 2,375 spaces available for new students in 2011-2012, which were filled with a total of 2,545 students. This represents the ninth consecutive year pre-licensure nursing programs in the Bay Area enrolled more students than were spaces available. Qualified applications to the region's programs in 2011-2012 totaled 7,812, 67.4% of which were not accepted for admission.

In 2011-2012, pre-license nursing programs in the Bay Area reported 2,148 completions, almost double the 1,305 completions reported in 2002-2003. However, if the current retention rate of 82.5% remains consistent, and if new student enrollments decline from their current level, the annual number of graduates from Bay Area nursing programs is likely to decline in future years. At the time of the survey, 26.5% of recent graduates from Bay Area RN programs were unable to find employment in nursing.

Clinical simulation has become widespread in nursing education, with all nursing schools in the Bay Area reporting using it in some capacity. It is seen by schools as an important tool for providing clinical experiences that are otherwise unavailable to students, standardizing students' clinical experiences, and monitoring clinical competencies. The importance of clinical simulation is underscored by data showing that over half of Bay Area programs are being denied access to clinical placement sites that were previously available to them, and that schools are increasing their number of out-of-hospital clinical placements. In addition, 81.5% of Bay Area nursing schools (n=22) reported that their students had faced restrictions to specific types of clinical practice during the 2011-2012 academic year.

Expansion in RN education has required nursing programs to hire more faculty to teach the growing number of students. Although the number of nursing faculty has increased significantly in the past ten years, faculty hires have not kept pace with the growth in Bay Area pre-licensure nursing programs. In 2011-2012, 133 faculty vacancies were reported, representing a faculty vacancy rate of 14.4%. Faculty vacancy rates of 15% or higher were reported by approximately one-quarter of all programs in the Bay Area, with a small number of programs reporting vacancy rates of 20% or higher.

APPENDICES

APPENDIX A – Bay Area Nursing Education Programs

ADN Programs (18)

Cabrillo College
Chabot College
City College of San Francisco
College of Marin
College of San Mateo
Contra Costa College
De Anza College
Evergreen Valley College
Gavilan College

Los Medanos College
Merritt College
Mission College
Napa Valley College
Ohlone College
Pacific Union College
Santa Rosa Junior College
Solano Community College
Unitek College

BSN Programs (8)

CSU East Bay
Dominican University of California
Holy Names University
Samuel Merritt University
San Francisco State University

Sonoma State University
University of San Francisco
The Valley Foundation School of Nursing at
San Jose State University

ELM Programs (4)

Samuel Merritt University
San Francisco State University
University of California San Francisco
University of San Francisco

APPENDIX B – BRN Education Issues Workgroup

BRN Education Issues Workgroup Members

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